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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Summany	10/591,610	SCHOLZ ET AL.				
Office Action Summary	Examiner	Art Unit				
	MICHAEL A. SALVITTI	1767				
The MAILING DATE of this communication appo Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	TE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tim ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	lely filed the mailing date of this communication. (35 U.S.C. § 133).				
Status						
Responsive to communication(s) filed on 30 November 2010. This action is FINAL . 2b) This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
 4) ☐ Claim(s) 1-8 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-8 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. 						
Application Papers						
9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Examiner	epted or b) \square objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) ☒ Acknowledgment is made of a claim for foreign a) ☒ All b) ☐ Some * c) ☐ None of: 1.☐ Certified copies of the priority documents 2.☐ Certified copies of the priority documents 3.☒ Copies of the certified copies of the priori application from the International Bureau * See the attached detailed Office action for a list of	have been received. have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 09/10/2010. 5. Patent and Trademark Office	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Cthet:	ite				

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 4 and 5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 4, reciting a bulk density of at "least approximately 120 g/L" is lacking support in the disclosure.

Regarding claim 4: The instant specification provides no support for compacted bulk densities above 266 g/L; values above this amount have been interpreted to be new matter. The value 266 g/L is seen in the data in Table 3. The written description does not teach or suggest compacted bulk densities larger than 266 g/L.

Regarding claim 4: Claim 4 recites "...a compacted bulk density of at least approximately 120 g/L". 120 g/L is the absolute lowest limit disclosed by applicant, and is found in Table 3. The specification does not support values below 120 g/L.

Therefore, claim 4 has been interpreted to be new matter.

Regarding claim 5: Claim 5 recites "...a compacted bulk density of at least approximately 120 g/L but less than about 266 g/L". 120 g/L is the absolute lowest limit

disclosed by applicant, and is found in Table 3; 266 g/L is the absolute highest limit disclosed by applicant, and is found in Table 3. The specification supports neither values below 120 g/L nor values above 266 g/L. Therefore claim 5 has been interpreted to be new matter.

Claim 4 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for silica having a compacted bulk density having values between 120-266 g/L, does not reasonably provide enablement for values above or below 120-266 g/L. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

Regarding claim 4: As addressed above, applicant's claimed range of above 120 g/L is derived from Table 3. The absolute highest and lowest values in this table are 120 g/L and 266 g/L. It is the examiner's position that Table 3 teaches sufficient data points such that values between 120-266 g/L are enabled. However, applicant has not provided a teaching or suggestion that values above 266 g/L are either possible or desirable. Therefore, claim 4 has been rejected for being non-enabling for values above 266 g/L.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 7-8: Claims 7-8 recite product-by-process limitations in reference to claim 1. These limitations are indefinite for the reason that claim 1 is purely directed to a product. Therefore the following issues of indefiniteness arise:

- 1) the claimed grinding, surface and structure modification and heat treatment steps in claims 7-8 do not have proper antecedent basis in claim 1, because claim 1 recites no process steps.
- 2) essential steps are omitted, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: a) in claims 1 and/or 7, a step of surface and structure modification is absent; b) in claim 8, it is indefinite at which point in the process the grinding occurs, or which grinding step is being referred to (a prelimitary grinding step on silica, the structure modification step, or the post-grinding step).
- 3) The specification teaches grinding occurring in several different process steps throughout. It is therefore indefinite which grinding step is occurring.

For the purposes of further examination, claims 7-8 will be interpreted broadly with the teachings of page 1-3 as a guidance as:

Claim 7: "The silicone rubber according to claim 1, wherein the structurally modified hydrophobic pyrogenic silica is produced by surface and structure modification of silica, then further ground."

Claim 8: "The silicone rubber according to claim 7, wherein subsequent to grinding, there is a heat treatment."

The following is a quotation of the fourth paragraph of 35 U.S.C. 112:

Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

Claims 4 and 5 are rejected under 35 U.S.C. 112, fourth paragraph, as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s) or amend the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Regarding claims 4 and 5: Claims 4 and 5 recite the silica as having specified compacted bulk densities. These limitations fail to further limit claim 1, for the reason that claim 1 requires the silica to be in a particulate filler form, whereas claims 4 and 5 refer to a bulk property. The bulk property does not limit the particles having the required BET and DBP values.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,331,588 to *Azechi et al.*

Regarding claims 1-2: Azechi (Example 1, col. 8) teaches a silicone rubber containing an effective amount of silanized (27.6% pbw see Table 1; 40 parts filler in 145 parts total composition), structurally modified (col. 5, lines 10-23) hydrophobic pyrogenic (fumed) silica (*Azechi* col. 7, lines 55-67). These hydrophobic pyrogenic silicas have BET surface area of 180 m²/g (S4; see col. 8 Table). Of the 33 surface modifying agents disclosed by name, 7 incorporate methyl and vinyl functionality (e.g. 1,3-divinyltetramethyldisilazane; *Azechi* col. 5, lines 35-62). Modification incorporating methyl and vinyl functionality has been held to be at once envisaged from the short list of potential modifiers.

Although *Azechi* is silent regarding the property of a DBP value % <200 or not determinable, the DBP value % of *Azechi* has been held to be inherent for the following reasons: *Azechi* teaches: 1) pyrogenic (*Azechi* col. 4, line 59); 2) structurally modified (*Azechi* col. 5, lines 10-23); 3) methyl and vinyl modified hydrophobic silica (*Azechi* col. 5, lines 35-55), which 4) has a BET surface area of 100-400 m²/g (*Azechi* col. 4, lines 59-60). "Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). See MPEP § 2112.01 (II). Since all of the components are present in the composition of *Azechi*, it has been held inherent that the composition

of *Azechi* would have the required DBP value % properties. If it is applicant's position that this is not the case: (1) evidence would need to be presented to support applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no reaching as to how to obtain a composition with the required DBP value.

The property of "high tear propagation resistance" has been interpreted to be inherent to the composition of *Azechi*, since all components of the recited composition are present.

Regarding claim 3: The silicone rubber of *Azechi* is a liquid silicone rubber (see Title, Abstract, col. 1, lines 50-55 and viscosity measurements in Example 1).

Regarding claim 6: All examples in *Azechi* (Table 1) show 100 parts organopolysiloxane, 5 parts organohydrogen polysiloxane and 40 parts silica. $40/(100+5+40) \times 100\% = 27.6\%$. This has been interpreted to be "about twenty percent".

Regarding claim 7: Azechi teaches a grinding step subsequent to surface modification (Azechi col. 7, lines 10-16)

Regarding claim 8: Azechi teaches a heat treatment subsequent to the grinding (Azechi col. 7, lines 45-50).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,331,588 to *Azechi et al.* in view of US 2003/0195290 to *Scholz et al.*

These rejections of claims 1-3 and 6 under 35 U.S.C. § 103(a) are alternative rejections to the rejections of claims 1-3 and 6 set forth under 35 U.S.C 102(b) above, in the instance that the DBP value is not inherent in *Azechi*.

Regarding claims 1-2: Azechi (Example 1, col. 8) teaches a silicone rubber containing an effective amount (27.6 pbw see Table 1; 40 pbw silica in 145 parts total composition) of structurally modified (col. 5, lines 10-23) hydrophobic pyrogenic (fumed) silica (Azechi col. 7, lines 55-67). These hydrophobic pyrogenic silicas have BET of 300 m²/g (S4; see col. 8 Table), and are methyl-modified (e.g. hexamethyldisilazane in Example, col. 7). Of the 33 surface modifying agents disclosed by name, 7 incorporate methyl and vinyl functionality (e.g. 1,3-divinyltetramethyldisilazane; Azechi col. 5, lines 35-62). Modification incorporating methyl and vinyl functionality has been held to be at once envisaged from the short list of potential modifiers.

Azechi is silent regarding the silica having a DBP value % <200 or not determinable. Scholz (Examples 2 and 7) show silica with a DBP value % <200; DBP is stated to be a result-effective variable, wherein higher DBP values result in an increase in thickening, and vice-versa (Scholz ¶ [0013]). Azechi and Scholz are analogous art in that they are drawn to the same field of endeavor, namely hydrophobically modified

silicas having a BET surface area <1000 m²/g, which are used as structural reinforcements in silicone rubber resins. At the time of the invention, it would have been obvious to a person having ordinary skill in the art to utilize a hydrophobic silica with a DBP <200 % in the invention of *Azechi*, with the motivation of ensuring that the resin does not become too viscous to mold.

Regarding claim 3: The silicone rubber of *Azechi* is a liquid silicone rubber (see Title, Abstract, col. 1, lines 50-55 and viscosity measurements in Example 1).

Regarding claim 6: All examples in *Azechi* (Table 1) show 100 parts organopolysiloxane, 5 parts organohydrogen polysiloxane and 40 parts silica. 40/(100+5+40) x 100% = 27.6%. This has been interpreted to be "about twenty percent".

Alternatively, *Azechi* describes the silica filler as a result-effective variable comprising 2-80% of the composition. At the time of the invention, it would have been obvious to a person having ordinary skill in the art to optimize the content of modified silica to about 20% in *Azechi*, with the motivation of providing sufficient mechanical strength (for values on the low end of the range) while avoiding processing difficulties (for values on the high end of the range; *Azechi*, 5:63-6:3).

Regarding claim 7: Azechi teaches a grinding step subsequent to surface modification (Azechi col. 7, lines 10-16)

Regarding claim 8: Azechi teaches a heat treatment subsequent to the grinding (Azechi col. 7, lines 45-50).

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Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,331,588 to *Azechi et al.* in view of US 2002/0077412 to *Kobayashi et al.*, or alternatively over U.S. Patent No. 6,331,588 to *Azechi et al.* in view of US 2003/0195290 to *Scholz et al.*, as applied to claim 1 above, further in view of US 2002/0077412 to *Kobayashi et al.*

Regarding claims 4-5: Azechi alone, and also the combination of Azechi and Scholz, collectively teach the composition of claim 1, as set forth above.

Azechi is silent regarding the compact bulk density of the silica as being between 120-266 g/L. Kobayashi teaches silicone resins comprising silica with a bulk density of 100-300 g/L, overlapping the claimed range of 120-266 g/L with sufficient specificity. "Compacted" has been interpreted to be a product-by-process limitation, since density is a unit of measurement represented in grams per liter, and compaction is a process in achieving this density. Azechi and Kobayashi are analogous art in that they are concerned with the same technical feature, namely ensuring that silicone resins containing hydrophobically modfiled silica retain good processability. At the time of the invention, it would have been obvious to a person having ordinary skill in the art to compact the silica of Azechi to a density of 120-266 g/L, as taught in Kobayashi, with the motivation of ensuring flowability of the composition (Kobayashi ¶ [0023]), thereby achieving Azechi's stated goal of avoiding unwanted thickening (Azechi col. 1, lines 30-35).

Double Patenting

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The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 3 of U.S. Patent No. 7,563,839 in view of U.S. Patent No. 6,331,588 to *Azechi et al.* Although the conflicting claims are not identical, they are not patentably distinct from each other.

Regarding claims 1-2: *USPN '839* recites a silicone rubber containing methyl-modified hydrophobic pyrogenic silica having a surface area, as measured by BET, of 25-400 and a DBP value % <200 (*US '839* claim 3). The silica contains methyl groups affixed to its surface (*US '839* claim 3).

USPN '839 is silent regarding modification of the silica with a vinyl. Azechi teaches affixing both methyl and vinyl groups to the surface of silica filler materials in

silicone rubber compositions (*Azechi* col. 5). *USPN '839* and *Azechi* are analogous art in that they are drawn to the same field of endeavor, namely silicone resins comprising surface-modified silica particulates. At the time of the invention, it would have been obvious to a person having ordinary skill in the art to modify the composition of *USPN '839* with a vinyl modifier, with the motivation of improving the pot life of the silica (*Azechi* col. 1, lines 40-45).

Regarding claim 3: USPN '839 recites liquid silicone rubber (LSR; claim 3).

Regarding claim 6: USPN '839 is silent in reciting the content of filler material. Azechi teaches the silica filler as a result-effective variable comprising 2-80% of the composition, with preferred values about 20%. At the time of the invention, it would have been obvious to a person having ordinary skill in the art to optimize the content of modified silica to about 20% in USPN '839, with the motivation of providing sufficient mechanical strength (for values on the low end of the range) while avoiding processing difficulties (for values on the high end of the range; Azechi, 5:63-6:3).

Regarding claims 7-8: *USPN '839* is silent regarding recitation of the claimed product-by-process steps. *Azechi* teaches a grinding step subsequent to surface modification (*Azechi* col. 7, lines 10-16) *Azechi* teaches a heat treatment subsequent to the grinding (*Azechi* col. 7, lines 45-50). At the time of the invention, it would have been obvious to a person having ordinary skill in the art to prepare the composition of *USPN '839* according to the process of *Azechi*, with the motivation of bonding the hydrophobic modifier to the silica filler (*Azechi* col. 7, lines 5-16).

Response to Arguments

The following responses are directed to the document entitled "Remarks" (pages 4-10) received November 30th, 2010.

A) Applicant's arguments with respect to the rejection of claim 4 (pages 4-5 of "Remarks") under 35 U.S.C. § 112, first paragraph as containing new matter for portions of the claimed temperature range been fully considered but they are not persuasive.

Claim 4 remains rejected on grounds of new matter. The claimed range of compacted bulk density in claim 4 is derived from data points within applicant's specification.

The Examiner has rejected claim 4 on grounds of new matter for the reason that 1) the broad specification does not support the existence of ranges; 2) the specification does not point a person having ordinary skill in the art towards developing silica with a compacted bulk density above 266 g/L (which is the highest point exemplified throughout Table 3 and throughout the specification); 3) there is no indication that applicant had possession of a silica with a compacted bulk density above 266 g/L at the time of the invention; applicant does not disclose the process parameters necessary to obtain compacted bulk density above 266 g/L.

It is for the aforementioned reasons that Examiner maintains his position that Claim 4 contains new matter, while claim 5 (which limits the top of the range to the highest data point created) has been interpreted to not contain new matter. Applicant's argument that higher values of compacted bulk density being possible are moot, since there is no teaching, suggestion or motivation enabling a person having ordinary skill in

the art to achieve this from the instant disclosure. Therefore the rejection of claim 4 under 35 U.S.C. § 112, first paragraph has been maintained.

Upon further consideration, scope of enablement has been applied, since making and or using silica with a compact bulk density below 120 g/L and above 266 g/L are not enabled.

- **B)** The rejection of claims 1-6 under 35 U.S.C. § 112, second paragraph for issues of indefiniteness concerning the term "DBP" has been reconsidered in view of applicant's submitted evidence and arguments. Therefore the rejection of claims 1-6 under 35 U.S.C. § 112, second paragraph has been withdrawn.
- **C)** Applicant's arguments with respect to the rejection of claims 1-3 and 6 under 35 U.S.C. § 102(b) to *Azechi* (USPN 6,331,558) have been fully considered but they are not persuasive.
- 1) Applicant's arguments concerning the applied case law (*In re Petering*) have been considered, but have not been found to be persuasive.

While it is noted that *In re Petering* (MPEP § 2131.02) is drawn to a Markush structure having a limited number of choices, and the instant rejection to *Azechi* is drawn to selection of named chemical species from a limited number of choices, the fact pattern used in the rejection of claims 1-3 and 6-8 under 35 U.S.C. § 102(b) to *Azechi* is similar to that of *Petering*.

In *Petereing*, the board held one of 20 potential compounds as being anticipatory. In the instant case, 7 of the 33 named species contain both methyl and vinyl functionality. Therefore, *Azechi* teaches the claimed composition with anticipatory

sufficient specificity. Further case law in support of this position is *In re Sivaramakrishnan*, 673 F.2d 1383, 213 USPQ 441 (CCPA 1982) (also in MPEP § 2132.02), in which the CCPA held the specific naming of <u>one</u> species from a large list as anticipatory.

Therefore, the rationale of anticipation for the claimed modified silica has been maintained.

2) With regard to the inherency of DBP value in *Azechi*, the Examiner has provided a scientific rationale regarding the inherency of this property, and further supported its obviousness in the rejection set forth above.

"[T]he PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his [or her] claimed product. Whether the rejection is based on inherency' under 35 U.S.C. 102, on prima facie obviousness' under 35 U.S.C. 103, jointly or alternatively, the burden of proof is the same...[footnote omitted]." The burden of proof is similar to that required with respect to product-by-process claims. In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980) (quoting In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977)). See MPEP § 2112 V.

D) Applicant's argument that tapped density is different than compacted bulk density, citing USPN 7,780,937 as evidence, has been found to be persuasive. Therefore the rejection of claims 4-5 over *Scholz* has been withdrawn. However, a new ground of rejection has been made over *Kobayashi*.

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E) Applicant's arguments with regard to the non-statutory obviousness-type double patenting over USPN 7,563,839 in view of *Azechi* have been considered, but have not been found to be persuasive.

In response to applicant's argument that it would not be obvious to remove carbon black from *USPN '839*, it is noted that this is a most argument on two grounds.

First, the rejection does not require the removal of carbon black from *USPN '839*. Second, the instant claimed invention is open-ended by selection of the term "containing" as the transitional phrase. This term has been interpreted to have the same open-ended scope as "comprising". See MPEP § 2111.03.

Therefore, the double patenting rejection over *USPN '839* has been maintained.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL A. SALVITTI whose telephone number is (571)270-7341. The examiner can normally be reached on Monday-Thursday 8AM-7PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. A. S./ Examiner, Art Unit 1767

/Mark Eashoo/

Supervisory Patent Examiner, Art Unit 1767